UNIVERSITY OF JOHANNESBURG

Department of Commercial Accounting

Cost and Financial Management 3A

CFM33A3 & CFM3AA3

LAST ASSESSMENT OPPORTUNITY

Date: 28 May 2016

Time: 180 minutes **Marks: 100**

Assessors: M Mouton, L Joubert and M van Rensburg
Internal moderator: M Vermaak
External moderator: HJ Dixon (TUT)

INSTRUCTIONS:

- This paper consists of 9 pages (including the cover page).
- Answer all questions. **Show all calculations and workings clearly**.
- Start each question on a new page.
- Silent, non-programmable calculators may be used.
- Where applicable, round all calculations to two decimal places, unless stipulated otherwise.
- **Clearly indicate the group that you attend as well as the class list number (next to your name on the attendance register) next to the UJ logo on your script.**

Question	Topic	Marks	Time
1	Operational and cash budgets	40	72 minutes
2	Standard costing	35	63 minutes
3	CVP	15	27 minutes
4	Multiple choice (all topics)	10	18 minutes
		100	**180 minutes**

Question 1 {40}

B Clean (Pty) Ltd. is situated in Bubble Street Watertown. B Clean (Pty) Ltd. manufactures manual soap dispensers. The majority of their customers consists of small shopping centres. The company is well established in the market and aims to provide a value for money product.

They manufacture two products; basic soap dispenser (BSD) and deluxe soap dispenser (DSD). Two materials are required to make each of these products, namely white plastic (WP) and transparent plastic (TP). The BSD is sold for R90 and the DSD is sold for R125.

B Clean (Pty) Ltd. would like to reduce costs and asked for your input with regards to the stance of their business. They provided you with the following:

Manufacturing cost per unit: BSD

Direct material:	
1 kg of WP	R13.00
1 kg of TP	R15.00
Direct labour (1.5 hours)	R18.00
Manufacturing overheads:	
Variable (based on labour hours)	R10.50
Fixed (allocated on a per unit basis)	R4.00

Manufacturing cost per unit: DSD

Direct material:	
2 kg of WP	R26.00
1 kg of TP	R15.00
Direct labour (2 hours)	R24.00
Manufacturing overheads:	
Variable (based on labour hours)	R14.00
Fixed	R4.00

The fixed manufacturing overhead is based on normal activity of 15 000 products produced by B Clean (Pty Ltd) per quarter.

Quarterly Sales Estimates

	BSD	DSD
3rd Quarter 2016 (July – September)	8 000	7 000
4th Quarter 2016 (October – December)	6 000	6 000
1st Quarter 2017 (January – March)	5 000	4 000

Inventory Policy	
Finished goods	30% of the following quarter's sales must be in the warehouse at the end of each quarter. Assume sales equals demand.
Direct material	80% of a quarter's opening inventory must be in the warehouse at the end of each quarter. Opening inventory for **Quarter 4**: WP 7 000 kg TP 3 500 kg

Administrative and marketing costs:

Advertisements	R12 000 per quarter
Administrative	R30 000 per quarter

Cash payment policy:

All direct materials are purchased cash. All other payments are made as the expenses occur.

Trade receivable collections:

25% of the sales is cash sales and the rest is on credit. 50% of the credit sales are paid during the month in which the sales occur and the rest during the following month (assume equal monthly sales in each quarter).

Additional information:

- Prices, costs and the manufacturing process remained unchanged for all the periods.
- Cash balance at the end of **Quarter 3** is R172 000.
- Assume that today is 30 June, the end of the 2nd Quarter 2016.

Required:

1.1 Prepare the sales budget for quarters 3 and 4. Show your calculations per quarter. **(6)**

1.2 Prepare the production budget in units for quarter 4. Show the total for each product. **(6)**

1.3 Prepare the material purchases budget for quarter 4. Show the quantity and Rand value per material as well as the total value of material purchases. **(10)**

1.4 Prepare the labour budget for quarter 4. **(4)**

1.5 Prepare the manufacturing overhead (variable and fixed) budget for quarter 4. **(3)**

1.6 Prepare the cash budget for quarter 4. Show all workings clearly. **(11)**

Question 2 {35}

Viva-Africa Ltd manufactures leather products with one of the products produced being a leather laptop bag with a budgeted selling price of R1 850. Viva-Africa Ltd employs a variable standard costing system.

The standard information and associated standard costs for producing a laptop bag are as follows:

Direct material:	
Leather	450 millimetres of leather at R1 920 per meter
Direct labour:	
Cutting	1 hour and 30 minutes at R75.00 per hour
Stitching & finishing	2 hours and 45 minutes at R40.00 per hour
Variable manufacturing overhead rate	R120.00 per machine hour
Machine hours per laptop bag	¼ machine hour

Annual budgeted fixed manufacturing overheads was forecasted at R90 000 and normal annual production was set at 6 000 laptop bags. Fixed manufacturing overhead cost and production incurs evenly throughout the year.

During May 2016, Viva-Africa Ltd produced 550 laptop bags. The following are the actual information and costs that were incurred during May:

- Purchased 220 meters of leather, totalling R418 000.
- A total cost of R61 600 was debited relating to the 770 direct labour hours worked in the cutting department.
- The stitching and finishing department recorded 1 540 hours at a cost of R58 520.
- 130 machine hours were used at a total cost of R17 187.50.
- Fixed manufacturing overheads amounted to R7 700.
- Total sales recorded amounted to R969 900.
- Leather inventory: 1 May 2016 – 37 meters
- Leather inventory: 31 May 2016 – 25 meters
- Laptop bags in inventory: 1 May 2016 - 15
- Laptop bags in inventory: 31 May 2016 – 35

The direct material price variance is determined at the time of purchase and the direct material quantity variance is determined at the time of production.

Required:

2.1 Compile a standard cost card to establish the standard cost per laptop bag. **(2)**

2.2 Calculate all applicable variances (the total variances can be omitted). Show the applicable formula for each variance. Hint: Material, labour, variable overheads, fixed overheads and sales. **(25)**

2.3 Give possible reasons for the material, labour (cutting department), variable overhead and the sales variances as calculated in 2.2 above. **(8)**

Question 3 {15}

Jackson Limited produce and sell a single product in the low-income consumer market. Jackson has enough capacity to produce 35 000 products per month. The following information is available for May:

Units produced and sold	26 500
Total sales revenue	R397 500
Variable production cost per product	R9.50
Total variable non-production cost	R39 750
Total fixed production cost	R77 000
Total fixed non-production cost	R25 000

Required:

3.1 Use a marginal statement of comprehensive income to determine the break-even point in number of products as well as the break-even value. **(6)**

3.2 Your manager requested you to determine the margin of safety (MoS) ratio and to explain the significance of the MoS ratio to her. **(3)**

3.3 Jackson Limited wish to make a before-tax profit of R111 000. Determine the selling price to be charged if the full capacity products are sold. Comment on the appropriateness of the calculated selling price. **(6)**

Question 4 {10}

Choose the correct option and write it next to the question number in your script. Show all calculations where applicable.

4.1 Which of the following assumptions does not pertain to cost-volume-profit analysis? **(1)**

a. The units produced will equal the units sold
b. Inventories are constant
c. All costs are classified as fixed or variable
d. Sales mix may vary during the related period

4.2 Which of the following is **usually** prepared before the production budget? **(1)**

a. Direct material purchases budget
b. Direct labour budget
c. Sales budget
d. Cash budget

4.3 Brown Ltd. has budgeted for annual fixed manufacturing overheads of R60 000 for the coming year. Budgeted variable overhead is R0.10 per unit. For the next quarter, Brown plans to manufacture 500 000 units. Brown's budgeted total overhead for the quarter is: **(3)**

a. R50 000
b. R65 000
c. R110 000
d. R290 000

4.4 For better control of direct material prices, when should the direct material price variance be recognised? **(1)**

a. When material is purchased
b. When material is issued from the storeroom
c. When material is put into production
d. When production is completed

4.5 Labour efficiency variances may be caused by **(1)**

a. The use of highly skilled workers
b. Frequent machinery breakdowns
c. The use of marginally skilled workers
d. All of the options are causes of labour efficiency variances

4.6 Who is responsible for unfavourable labour efficiency variances caused by poor quality materials? **(1)**

a. Warehouse manager
b. Production manager
c. Procurement manager
d. General manager

4.7 The standard fixed overhead rate is calculated as: **(1)**

a. Actual fixed overhead ÷ Actual activity
b. Budgeted fixed overhead ÷ Budgeted activity
c. Budgeted fixed overhead ÷ Actual activity
d. Actual fixed overhead ÷ Budgeted activity

4.8 The volume variance is caused by **(1)**

a. The difference between the activity allowed for the actual output and the budgeted activity used in computing the fixed overhead rate
b. The difference between the total budgeted fixed overhead and the total standard fixed overhead assigned to production
c. The difference between the activity allowed for the actual output and the total standard fixed overhead assigned to production
d. The difference between the standard fixed overhead rate and the actual fixed overhead rate

Total marks [100]